KEY TO VIOLETS (VIOLA, VIOLACEAE) OF NACOGDOCHES COUNTY, TEXAS

JANICE BURROUGHS LACEY

Drawer 1312, Nacogdoches, Texas 75961

This key is of service in a very small geographical area. Most Nacogdoches violets are in the group known as the stemless blues, which is poorly understood and overdefined. *Viola* students will notice some changes of emphasis on morphological characters, differences in data from those of other workers and more use of the style for delimiting taxa. Although the local stemless blues are presented in this key as species, the author's data lead her to see them as the most successful phenotypes among the many emerging from the local gene-pool.

KEY TO NACOGDOCHES COUNTY, TEXAS, VIOLETS (VIOLA-VIOLACEAE).

| (VIOLII VIOLIII). |
|---|
| 1. Plants with aerial stems. |
| 2. Stems soon prostrate |
| 2. Stems erect. |
| 3. Petals yellow V. pensylvanica Michx. |
| 3. Petals not yellow. |
| 4. Leaves small with obtuse tips, |
| petals violet V. rafinesquii Greene |
| 4. Leaves larger with acute tips, |
| petals tricolored, cultivated V. tricolor L. |
| 1. Plants without aerial stems. |
| 5. Petioles and peduncles arising from stolons. |
| 6. Leaves ovate |
| 6. Leaves lanceolate |
| 5. Petioles and peduncles arising from rhizomes. |
| 7. Style uncinate. |
| 8. Rhizomes and stolons present; cultivated V. odorata L. |
| 8. Rhizomes only present; cultivated $V.$ odorata L. \times $V.$ |
| hirta L. $	imes$? |
| 7. Style clavate. |
| 9. Style thick-clavate with stigmatic aperture on |
| side toward summit; flowers all chasmogamous, |
| none cleistogamous |
| 9. Style clavate, laterally beaked; flowers |
| chasmogamous and cleistogamous in spring, cleistogamous only in summer. |
| 10. Leaves crenate, dentate or serrate, |
| not deeply lobed or divided. |
| 11. Plants glabrous. |
| |

| 12. Spur petal glabrous V. Langloisii Greene |
|---|
| 12. Spur petal bearded. |
| 13. Petals pied, purplish or reddish V. affinis LeConte |
| 13. Petals white, all or in part V. affinis LeConte |
| forma albiflora Henry |
| 11. Plants pubescent. |
| 14. Leaves orbicular to ovate, veins reddish, spur |
| of lower petal large, cream-colored V. villosa Walter |
| 14. Leaves cordate-ovate, veins not reddish, spur |
| of lower petal not large, cream-colored. |
| 15. Stigmatic aperture small, at end of |
| beak; petals blue to purple V. sororia Willd |
| var. sororio |
| 15. Stigmatic aperture large, long on top |
| of beak; petals white; cultivated V. sororia Willd |
| var. incognita Lacey |
| 10. Leaves lobed or divided. |
| 16. Plants glabrous. |
| 17. Leaves lobed sagittately V. sagittata Ait |
| 17. Leaves lobed otherwise. |
| 18. Plants confined to Angelina and |
| Attoyac River banks V. Langloisii Greene |
| 18. Plants of drier, |
| disturbed habitats V. Lovelliana Brainero |
| 16. Plants pubescent. |
| 19. Leaves 2-3 cleft V. Lovelliana Brainerd |
| 19. Leaves divided nearly to base into |
| 5-7 segments V. triloba Schwein |
| var. dilatata (Ell.) Brainerd |
| |

VIOLA SORORIA var. **incognita** Lacey, var. nov. Culta (originis ignotae), etiam fera. Apertura stigmatis magna supra rostrum elongata. Petala alba. HOLOTYPE. TEXAS, Nacogdoches Co.: yard of Miss Lum Shipe, Raguet St., Nacogdoches. A cultivated violet that has naturalized. White petals. Breeds true over a long period of years. Cleistogenes purple spotted. *Janice B. Lacey 30*, 24 March 1955. PARATYPES. Cleistogamous plant coll. 12 April 1955 (mounted on same sheet with preceding). Same locality, *Lacey 30A*, 7 July 1955. (All specimens at SMU.)

REFERENCES

ANDERSON, E. 1955. Confederate Violets. Landscape, Summer 1955: 7-11.

CAMP, W. H. 1961. The Pattern of Variability and Evolution in Plants. A Darwin Centenary, Arbroath, T. Buncle. Ltd. September 1961: 59-68.

LACEY, J. B. 1967. Three Observations on Viola (Violaceae) in Nacogdoches County, Texas. Sida 3 (3): 184. 1967.